IN THE SPECIFICATION:

Please amend the Specification as follows:

Page 6, paragraph 18, is amended as follows:

Fig. 8 is a perspective view of another embodiment of a cable tension sensing device; ~~and~~

Page 6, paragraph 19, is amended as follows:

Fig. 9 is a perspective view of still another embodiment of a cable tension sensing device[[~~.~~]]; and

Page 6, insert new paragraph after paragraph 19 as follows:

Fig. 10 is a schematic view showing the control assembly and its connections to the sensing device and the motor.

Page 7, paragraph 24, is amended as follows:

--The motor 34 is connected to the electrical control assembly 30 that controls actuation of the motor 34. The electrical control assembly 30 may be connected to a manual switch within the passenger compartment that is selectively actuated to cause the control assembly 30 to operate the motor 34 in the brake-applying or brake-releasing directions. The cable tension sensing device 32 is also connected to the control assembly 30 so that the motor 34 can be shut-off when tension in the brake cables 20, 24 has reached the predetermined minimum tension level or the predetermined maximum tension level, as will be further discussed. The connections between the control assembly 30, the motor 34, and the sensing device 30 are schematically represented in Figure 10. The manual switch may be similarly connected.--

Page 13, paragraph 43, is amended as follows:

Wires (not shown) electrically connect the first and second switch units 100, 102 with the control assembly 30 that controls actuation of the motor 34 of the electric brake actuator 26. This is schematically represented in Figure 10. The first and second switch units 100, 102 output signals to the control assembly 30, which interrupts the supply of power to the motor 34. Specifically, when the first switch 104 engages the actuating member 92 of the second attachment structure 48 during relative movement between the first and second

attachment structures 46, 48, a signal is outputted to the control assembly 30 which cuts power supplied to the motor 34. As a result, the motor 34 is prevented from rotating in the brake-releasing direction to further release tension to the brake cable 24. Conversely, when the second switch 108 engages the actuating member 92 of the second attachment structure 48 during relative movement between the first and second attachment structures 46, 48, a signal is outputted to the control assembly 30 which cuts power supplied to the motor 34. As a result, the motor 34 is prevented from rotating in the brake-applying direction to further apply tension to the brake cable 24. Thus, the sensor 98 is operable to sense a position of the actuating member 92 to determine the relative linear displacement between the first and second attachment structures 46, 48.

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-8 are canceled.

9. (Currently Amended) A brake actuator for actuating a brake ~~mechanisms~~ mechanism of a vehicle to apply and release a braking force to and from a wheel assembly of the vehicle, the actuator comprising:

a reversible motor;

an activation member operatively connected to the motor, the motor being selectively actuatable to move the activation member in a brake-applying direction and a brake-releasing direction;

a brake cable operatively connected between the activation member and the brake ~~mechanisms~~ mechanism of the vehicle such that (a) actuation of the motor to move the activation member in the brake-applying direction applies a force to the brake cable to increase tension in the brake cable, and (b) actuation of the motor to move the activation member in the brake-releasing direction releases the force to reduce the tension in the brake cable;

a sensing device for sensing a magnitude of the force transferred between the activation member and the brake cable, the sensing device comprising:

a first attachment structure;

a second attachment structure mounted to the first attachment structure to enable relative linear movement between the first and second attachment structures in opposing first and second directions, the first attachment structure being operatively connected to the activation member and the second attachment structure being operatively connected to the brake cable;

an actuating member provided on one of the first and second attachment structures;

a biasing structure positioned between the first and second attachment structures, the biasing structure enabling the force to be transferred from the activation member and the first attachment structure to the brake cable and the second attachment structure through the biasing structure with the biasing structure resiliently deflecting to allow relative linear displacement between the first and second attachment structures in an amount related to the magnitude of the force, the predetermined maximum displacement corresponding to an amount of the force sufficient to fully apply the vehicle's brake mechanism and the predetermined minimum displacement corresponding to an amount of the force sufficient to fully release the vehicle's brake mechanism; and

a sensor including a first switch and a second switch, each of the first and second switches being adapted to be actuated by the actuating member, the actuating member being positioned to actuate the first switch upon reaching a predetermined maximum linear displacement between the first and second attachment structures, the actuating member being positioned to actuate the second switch upon reaching a predetermined minimum linear displacement between the first and second attachment structures; and

a control assembly connected between the motor and the sensor of the sensing device, the co.ntrol assembly being operable to cease rotation of the motor in the brake-applying direction upon the first switch being actuated by the actuating member and to cease rotation of the motor in the brake-releasing direction upon the second switch being actuated by the actuating member.

10. (Original) The brake actuator according to claim 9, wherein the first attachment structure moves relative to the second attachment structure against biasing of the biasing structure upon the activation member being moved to increase tension in the cable, and the first attachment structure moves relative to the second attachment structure with

biasing of the biasing structure upon the activation member being moved to release tension from the cable.

11. (Original) The brake actuator according to claim 9, wherein the biasing structure is a spring.

12. (Original) The brake actuator according to claim 9, wherein the biasing structure is a set of wave washers.

13. (Original) The brake actuator according to claim 9, wherein the biasing structure is a set of Belleville washers.

14. (Currently Amended) A vehicle comprising:

a wheel assembly;

a brake mechanism mounted to the wheel assembly, the brake mechanism operable to apply a braking force to the wheel assembly <u>and to release the braking force</u>;

a brake actuator for actuating the brake mechanism of the wheel assembly, the brake actuator comprising:

a reversible motor;

an activation member operatively connected to the motor, the motor being selectively actuatable to move the activation member in a brake-applying direction and a brake-releasing direction;

a brake cable operatively connected between the activation member and the brake mechanism such that (a) actuation of the motor to move the activation member in the brake-applying direction applies a force to the brake cable to increase tension in the brake cable, and (b) actuation of the motor to move the activation member in the brake-releasing direction releases the force to reduce the tension in the brake cable;

a sensing device for sensing a magnitude of the force transferred between the activation member and the brake cable, the sensing device comprising:

a first attachment structure;

a second attachment structure mounted to the first attachment structure to enable relative linear movement between the first and second attachment structures in opposing first and second directions, the first attachment structure being operatively

connected to the activation member and the second attachment structure being operatively connected to the brake cable;

an actuating member provided on one of the first and second attachment structures;

a biasing structure positioned between the first and second attachment structures, the biasing structure enabling the force to be transferred from the activation member and the first attachment structure to the brake cable and the second attachment structure through the biasing structure with the biasing structure resiliently deflecting to allow relative linear displacement between the first and second attachment structures in an amount related to the magnitude of the force; and

a sensor including a first switch and a second switch, each of the first and second switches being adapted to be actuated by the actuating member, the actuating member being positioned to actuate the first switch upon reaching a predetermined maximum linear displacement between the first and second attachment structures, the actuating member being positioned to actuate the second switch upon reaching a predetermined minimum linear displacement between the first and second attachment structures, the predetermined maximum displacement corresponding to an amount of force sufficient to fully apply the brake mechanism and the predetermined minimum displacement corresponding to an amount of force sufficient to fully release the brake mechanism; and

a control assembly connected between the motor and the sensor of the sensing device, the control assembly being operable to cease rotation of the motor in the brake-applying direction upon the first switch being actuated by the actuating member and to cease rotation of the motor in the brake-releasing direction upon the second switch being actuated by the actuating member.

15. (Original) The vehicle according to claim 14, wherein the first attachment structure moves relative to the second attachment structure against biasing of the biasing structure upon the activation member being moved to increase tension in the cable, and the first attachment structure moves relative to the second attachment structure with biasing of the biasing structure upon the activation member being moved to release tension from the cable.

16. (Original) The vehicle according to claim 14, wherein the biasing structure is a spring.

17. (Original) The vehicle according to claim 14, wherein the biasing structure is a set of wave washers.

18. (Original) The vehicle according to claim 14, wherein the biasing structure is a set of Belleville washers.

19. (Original) The vehicle according to claim 14, wherein the wheel assembly is a rear wheel assembly.

20. (Currently Amended) A method for sensing a magnitude of force being applied to a brake cable by a motor using a sensing device, the brake cable being operatively connected to a brake mechanism of a vehicle for applying and releasing a braking force to and from a wheel assembly of the vehicle, the sensing device comprising (a) a first attachment structure operatively connected to the motor, (b) a second attachment structure operatively connected to the brake cable and mounted to the first attachment structure to enable relative linear movement between the first and second attachment structures, (c) an actuating member provided on one of the first and second attachment structures, (d) a biasing structure positioned between the first and second attachment structures and enabling the force to be transferred from the motor and the first attachment structure to the brake cable and the second attachment structure through the biasing structure with the biasing structure resiliently deflecting to allow relative linear displacement between the first and second attachment structures in an amount related to the magnitude of the force, (e) a sensor including a first switch and a second switch, each of the first and second switches being adapted to be actuated by the actuating member, the actuating member being positioned to actuate the first switch upon reaching a predetermined maximum linear displacement between the first and second attachment structures, the actuating member being positioned to actuate the second switch upon reaching a predetermined minimum linear displacement between the first and second attachment structures, the predetermined maximum displacement corresponding to an amount of force sufficient to fully apply the brake mechanism and the predetermined minimum displacement corresponding to an amount of force sufficient to fully release the

brake mechanism and (f) a control assembly connected between the motor and the sensor, the control assembly being operable to cease rotation of the motor in the brake-applying direction upon the first switch being actuated by the actuating member and to cease rotation of the motor in the brake-releasing direction upon the second switch being actuated by the actuating member, the method comprising:

operating the motor to vary a force applied to the cable through the sensing device to vary tension in the cable;

actuating with the actuating member one of the first switch upon the first and second attachment structures reaching the predetermined maximum displacement and the second ~~switches~~ switch upon the first and second attachment structures reaching the predetermined minimum displacement ~~with the actuating member~~; and

the control assembly detecting the actuation of the actuated switch and responsively ceasing operation of the motor.

Claims 21-36 are canceled.

37. (New) A brake actuator for actuating a brake mechanism of a vehicle to apply and release a braking force to and from a wheel assembly of the vehicle, the actuator comprising:

an activation member selectively actuatable to move in a brake-applying direction and a brake-releasing direction;

a brake cable operatively connected between the activation member and the brake mechanism of the vehicle such that (a) movement of the activation member in the brake-applying direction applies a force to the brake cable to increase tension in the brake cable, and (b) movement of the activation member in the brake-releasing direction releases the force to reduce the tension in the brake cable;

a sensing device for sensing a magnitude of the force transferred between the activation member and the brake cable, the sensing device comprising:

a first attachment structure;

a second attachment structure mounted to the first attachment structure to enable relative linear movement between the first and second attachment structures in opposing first and second directions, the first attachment structure being operatively

connected to the activation member and the second attachment structure being operatively connected to the brake cable;

an actuating member provided on one of the first and second attachment structures;

a biasing structure positioned between the first and second attachment structures, the biasing structure enabling the force to be transferred from the activation member and the first attachment structure to the brake cable and the second attachment structure through the biasing structure with the biasing structure resiliently deflecting to allow relative linear displacement between the first and second attachment structures in an amount related to the magnitude of the force, the predetermined maximum displacement corresponding to an amount of the force sufficient to fully apply the vehicle's brake mechanism and the predetermined minimum displacement corresponding to an amount of the force sufficient to fully release the vehicle's brake mechanism; and

a sensor including a first switch and a second switch, each of the first and second switches being adapted to be actuated by the actuating member, the actuating member being positioned to actuate the first switch upon reaching a predetermined maximum linear displacement between the first and second attachment structures, the actuating member being positioned to actuate the second switch upon reaching a predetermined minimum linear displacement between the first and second attachment structures; and

a signal responsive device connected to the sensor of the sensing device, the signal responsive device being operable responsive to actuation of the first and second switches by the actuating member.

38. (New) A vehicle comprising:

a wheel assembly;

a brake mechanism mounted to the wheel assembly, the brake mechanism operable to apply a braking force to the wheel assembly and to release the braking force;

a brake actuator for actuating the brake mechanism of the wheel assembly, the brake actuator comprising:

an activation member selectively actuatable to move in a brake-applying direction and a brake-releasing direction;

a brake cable operatively connected between the activation member and the brake mechanism such that (a) movement of the activation member in the brake-applying direction applies a force to the brake cable to increase tension in the brake cable, and (b)

movement of the activation member in the brake-releasing direction releases the force to reduce the tension in the brake cable;

a sensing device for sensing a magnitude of the force transferred between the activation member and the brake cable, the sensing device comprising:

a first attachment structure;

a second attachment structure mounted to the first attachment structure to enable relative linear movement between the first and second attachment structures in opposing first and second directions, the first attachment structure being operatively connected to the activation member and the second attachment structure being operatively connected to the brake cable;

an actuating member provided on one of the first and second attachment structures;

a biasing structure positioned between the first and second attachment structures, the biasing structure enabling the force to be transferred from the activation member and the first attachment structure to the brake cable and the second attachment structure through the biasing structure with the biasing structure resiliently deflecting to allow relative linear displacement between the first and second attachment structures in an amount related to the magnitude of the force; and

a sensor including a first switch and a second switch, each of the first and second switches being adapted to be actuated by the actuating member, the actuating member being positioned to actuate the first switch upon reaching a predetermined maximum linear displacement between the first and second attachment structures, the actuating member being positioned to actuate the second switch upon reaching a predetermined minimum linear displacement between the first and second attachment structures, the predetermined maximum displacement corresponding to an amount of force sufficient to fully apply the brake mechanism and the predetermined minimum displacement corresponding to an amount of force sufficient to fully release the brake mechanism; and

a signal responsive device connected to the sensor of the sensing device, the signal responsive device being operable responsive to actuation of the first and second switches by the actuating member.

39. (New) A method for sensing a magnitude of force being applied to a brake cable by an activation member using a sensing device, the brake cable being operatively

connected to a brake mechanism of a vehicle for applying and releasing a braking force to and from a wheel assembly of the vehicle, the sensing device comprising (a) a first attachment structure operatively connected to the activation member, (b) a second attachment structure operatively connected to the brake cable and mounted to the first attachment structure to enable relative linear movement between the first and second attachment structures, (c) an actuating member provided on one of the first and second attachment structures, (d) a biasing structure positioned between the first and second attachment structures and enabling the force to be transferred from the activation member and the first attachment structure to the brake cable and the second attachment structure through the biasing structure with the biasing structure resiliently deflecting to allow relative linear displacement between the first and second attachment structures in an amount related to the magnitude of the force, (e) a sensor including a first switch and a second switch, each of the first and second switches being adapted to be actuated by the actuating member, the actuating member being positioned to actuate the first switch upon reaching a predetermined maximum linear displacement between the first and second attachment structures, the actuating member being positioned to actuate the second switch upon reaching a predetermined minimum linear displacement between the first and second attachment structures, the predetermined maximum displacement corresponding to an amount of force sufficient to fully apply the brake mechanism and the predetermined minimum displacement corresponding to an amount of force sufficient to fully release the brake mechanism, and (f) a signal responsive device connected to the sensor of the sensing device, the signal responsive device being operable responsive to actuation of the first and second switches by the actuating member, the method comprising:

moving the activation member to vary a force applied to the cable through the sensing device to vary tension in the cable;

actuating with the actuating member one of the first switch upon the first and second attachment structures reaching the predetermined maximum displacement and the second switch upon the first and second attachment structures reaching the predetermined minimum displacement; and

the signal responsive device performing a function in response to actuation of the actuated switch.